

REMARKS

Status of the Claims

Claims 1-67 are pending. Claims 1-28 and 35-67 have been previously withdrawn from consideration, as being directed to a non-elected invention. Claims 29-34 are being examined. Claim 29 is the sole independent claim being examined.

Requested Action

Applicant respectfully requests the Examiner to reconsider and withdraw the outstanding rejections in view of the following remarks.

Claim Rejections

Claims 29-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent Publication No. 2003/0022038 (Vaal et al.).

These rejections are respectfully traversed for the following reasons.

Independent Claim 29 relates to a fuel cell system, comprising a fuel cell, a connecting part for connecting a fuel cartridge, and a sensor for detecting that the fuel cartridge is connected to the connecting part. Claim 29 also recites that a fuel is supplied from the fuel cartridge connected to the connecting part on the basis of the detection by the sensor to start replacement of gas in the fuel cell system.

By this arrangement, after a fuel cartridge is replaced, the time from the preparation operations (i.e., the attachment of the fuel cartridge, the turning on of power supply switch, etc.) prior to start of use of a device using the fuel cell and the time at which power is available from the fuel cell, can be minimized. As a result, after cartridge replacement, power can become

available before it is necessary, i.e., at the time of cartridge attachment, so that when power is needed, it is available immediately. Previous fuel cell systems, on the other hand, could take a substantial amount of time to make power available after a fuel cartridge was replaced, since they did not supply fuel from a new cartridge as soon as the new cartridge was detected to be attached to the fuel cell.

In contrast, the citation to Vaal et al. is not understood to relate to system for minimizing the time from the attachment of a fuel cartridge to the time at which power is available after a fuel cartridge is replaced. As a result, this citation is not understood relate to a system that makes power available immediately after cartridge replacement. Therefore, this citation is not understood to disclose or suggest that a fuel is supplied from a fuel cartridge connected to a connecting part of a fuel cell system on the basis of a detection by a sensor for detecting that the fuel cartridge is connected to the connecting part, to start replacement of gas in the fuel cell system, as recited by Claim 29.

Rather, the citation to Vaal et al. is understood to merely disclose a microcontroller 40 that receives various sensor measurements and controls fuel tank valves 56 of fuel tanks 52, and various sensors, such as a pressure sensor 62, as discussed in paragraphs [0049]- [0051]. Applicant has found no disclosure in this citation of a sensor for detecting that a fuel cartridge is connected to a connecting part of a fuel cell system, as recited in Claim 29. Moreover, it appears to Applicant that for sensor 62 to perform this function, would require the fuel tank valve 56 to be always open, and Applicant can find no disclosure or suggestion for doing so. Further, Applicant can find no disclosure or suggestion in this citation specifying the conditions under which and the timing at which the valves 56 are automatically controlled by the microprocessor 40 as they relate to cartridge replacement. More specifically, Applicant can find no disclosure or

suggestion for the concept of opening valves 56 on the basis of the detection of a sensor for detecting that the tank 52 is connected, to start replacement of gas in the system.

In the absence of any disclosure or suggestion of the concept of making power in a fuel cell system available automatically at the time of cartridge attachment, Applicant submits that the Office has not yet satisfied its burden of proof to establish the anticipation of or a prima facie case of obviousness against independent Claim 29. Therefore, Applicant respectfully requests that the rejection of Claim 29 be withdrawn.

The dependent claims are also submitted to be patentable, due to their dependency from the independent base claims, as well as due to additional features that are recited. Individual consideration of the dependent claims is respectfully solicited.

Conclusion

In view of the foregoing remarks, it is respectfully submitted that the pending claims are allowable over the art of record, and that the application is in condition for allowance. Therefore, favorable reconsideration and early passage to issue of the application are earnestly solicited.

The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 06-1205.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

/Gary M. Jacobs/

Gary M. Jacobs
Attorney for Applicant
Registration No. 28,861

FITZPATRICK, CELLA, HARPER & SCINTO
1290 Avenue of the Americas
New York, NY 10104-3800
Facsimile: (212) 218-2200
GMJ/klm